

**FEDERALLY
ENDANGERED**

Northern Right Whale

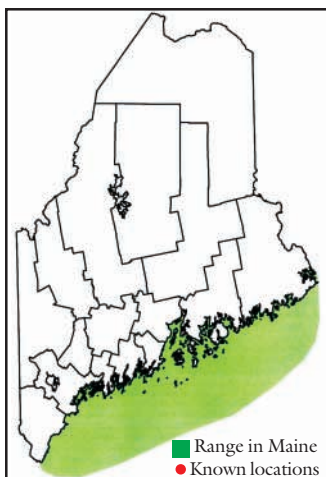
(Eubalaena glacialis)



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Description

The northern right whale is the world's rarest cetacean. It is a large, rotund, slow-swimming whale that inhabits shallow coastal waters. Because of its slow speed, large size, high blubber volume (causing it to float when dead), and propensity to inhabit shallow, coastal habitats, it was the "right" whale for 19th century whalers to hunt, thence its name. Right whales are distinguished by the absence of a dorsal fin; large head (about ¼ of total body length); curved mouth; throat grooves; paired nostril openings; and callosities (wartlike structures) around the eyes, blowhole, lower jaw, and on top of the snout. The body is 44-55 feet long, smooth, black to light gray, and appears mottled, with white underparts. The flippers are long (up to five feet) and broad, and are located below the level of the eyes. The tail flukes are broad (up to 18 feet wide). Baleen plates up to seven feet long are rooted in the gums of the upper jaw. Females are larger than males, and adults weigh 45-55 tons. They have a distinctive V-shaped spout or blow.



Range and Habitat

Right whales occur in the North Atlantic and North Pacific in extremely low numbers. In the Atlantic they have been observed from Iceland to Florida; however, they concentrate along the East coast from the

Bay of Fundy to Georgia and Florida. They prefer shallow inshore areas and are rarely observed far from the coast.

Life History and Ecology

Right whales occur singly, in pairs, or in small groups of 3-8 at feeding areas. Occasionally groups of up to 30 individuals are seen. New England waters represent a major feeding and nursery area. In March and April right whales congregate in the plankton-rich waters off Cape Cod Bay and Georges Bank in the Gulf of Maine and spend the summer in the Bay of Fundy and off the southeastern coast of Nova Scotia. Courtship occurs in August and September. During the winter months, a portion of the population, consisting of females and young calves, migrates to calving grounds in the shallow waters between Savannah, Georgia and Cape Canaveral, Florida. Calving peaks between December and March after an unknown gestation period. Calves average 15 feet long at birth and will nurse for at least nine months. Females give birth to one calf every 3-5 years. Lifespan is unknown. Males and females may reach sexual maturity at a body length of about 45 feet, which corresponds to about 7-10 years of age. Although they produce extensive and complex sounds underwater, they do not produce "songs" or use these sounds in echolocation as other whales do. Right whales filter-feed both at the surface and underwater. They swim with their mouths open and use their baleen plates to filter copepods (small crustaceans about the size of a grain of rice) and euphausiids (shrimp-like animals) from the water column.

Threats

Populations were nearly extirpated by commercial whaling. Because they are slow-moving, spend considerable time on the surface, and inhabit inshore areas, right whales are especially at risk of entanglement in fishing gear and collisions with ships. Marine ecosystem changes induced by global warming and pollution may affect food availability. Recreational whale-watching may occasionally cause disturbance, but this is believed to be insignificant. Because of the extremely small population size, any mortalities are significant and limit population recovery. Collisions with vessels have killed at least 13 right whales since 1976. There were 16 recorded encounters between right whales and fishing gear from 1975-1989, and 57 percent of photographed whales have scars and injuries from rope and net cuts. Right whales are likely affected by genetic problems associated with critically small populations.

Conservation and Management

Europeans began whaling along the East Coast as early as the 16th century. By the end of the 17th century, right whale populations had declined significantly from overhunting, but sporadic whaling continued into the 20th century. Right whales were hunted primarily for their oil and baleen. Whale oil, extracted from the blubber, was used primarily as an illuminant, and to a lesser extent for the tanning of leather and manufacture of candles, soap, and lard substitutes. Baleen was used in fashionable women's clothes, whips, and canes.

The North Atlantic population is now estimated to be 300-350 animals. The species has had almost complete protection since 1937, but populations have not increased. The right whale is protected from take and harassment by the federal Endangered Species Act and Marine Mammal Protection Act and was federally listed as endangered in 1970. Right whale populations are carefully monitored annually and a photo catalog has been established to identify and track individuals.

The right whale was the subject of intense public debate in the late 1990s when the National Marine Fisheries Service (NMFS) was sued to designate Critical Habitat and institute protection measures that could potentially close some inshore fisheries. In response, NMFS designated three seasonal feeding and calving areas as Critical Habitat. In 2000, the Atlantic Large Whale Take Reduction Team developed a Take Reduction Plan to implement specific gear modifications to reduce the risk of entanglements that lead to serious injury or

mortality to large whales on the Atlantic coast. Implementation policy is still changing. The Maine Department of Marine Resources has lead management authority for marine mammals, including the northern right whale.

Recommendations:

The Maine Department of Marine Resources recommends that National Marine Fisheries Service Guidelines for whale protection be employed. Regulations can be found at www.nero.nmfs.gov/whaletrp/. Current (2002) guidelines include the following:

- ✓ Dedicate state education and outreach efforts to fishermen.
- ✓ Close critical whale habitats to some types of fishing gear during times when whales are likely to be present.
- ✓ Prohibit some fishing practices (e.g., leaving inactive gear for more than 30 days) that increase risk of entanglement.
- ✓ Require some gear modifications in federal waters (e.g., knotless weak links in buoy lines for lobster traps and gillnets, no floating line at the surface) to reduce risk of entanglement.
- ✓ Utilize state and federal contacts for Whale Disentanglement Networks to locate entangled whales and remove gear. If you see an entangled whale, call the Northeast Disentanglement Network at 1-800-900-3622, the Coast Guard Station nearest you on 16 VHF Radio, the Maine Whale Take Reduction Coordinator, or the Maine Marine Patrol.
- ✓ Investigate and implement measures to reduce ship strikes of whales, including: 1) routing ships around observed whales, 2) restricting speed of vessels operating in whale habitats, 3) requiring mandatory shipping lanes when transiting through critical habitat areas, and 4) providing ship captains operating in critical habitats with the latest whale sighting data.
- ✓ Whale watchers must employ the following guidelines: 1) No vessel should approach closer than 300 yards. When whales are nearby, move at a constant, slow, "no wake" speed. 2) Do not engage props while whales are within 100 yards and do not chase whales. 3) When watching whales, do not box them in or cut off their path to prevent them from leaving. 4) Do not attempt to approach mothers with young calves. 5) Do not operate aircraft within 300 yards of a whale.
- ✓ Plan for protection of critical whale habitats in state and federal oil spill contingency planning. 🐋